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Report No. AL-11-0003

DEVELOPING LOCAL SUPPORT AND FUNDING FOR  
TRANSPORTATION SERVICE IN RURAL ALABAMA

Department of Community Planning and Urban Studies  
Alabama Agricultural and Mechanical University  
Normal, Alabama 35762



February 1987

FINAL REPORT

U.S. DEPARTMENT OF TRANSPORTATION  
URBAN MASS TRANSPORTATION ADMINISTRATION  
UNIVERSITY RESEARCH AND TRAINING PROGRAM  
WASHINGTON, D. C. 20590

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Constance W. Jordan

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16. Abstract  This study was designed to examine the issues related to rural public transportation focusing specifically on gaining local support and funding. The concept involved the establishment of a local group that would guide the planning and development of a program to improve the mobility of the transportation disadvantaged in the target area. Next, a field survey was undertaken to diagnose the transportation problems. Using the survey findings, the local support group developed goals and objectives for a transportation program to address the identified needs. An analysis of the transportation resources existing in the immediate and surrounding areas was then made. Based upon the existing conditions, a set of alternatives were developed and evaluated. This evaluation utilized a cost-effective analysis. To offset the local cost of transportation provision, revenue-generating concepts were proposed. Recommendations for continued local support group actions were suggested along with a plan for transportation service improvement for the mobility-limited population.			
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Arthur Holmes, Assistant Professor in the Department of Community Planning and Urban Studies provided invaluable assistance to the project.

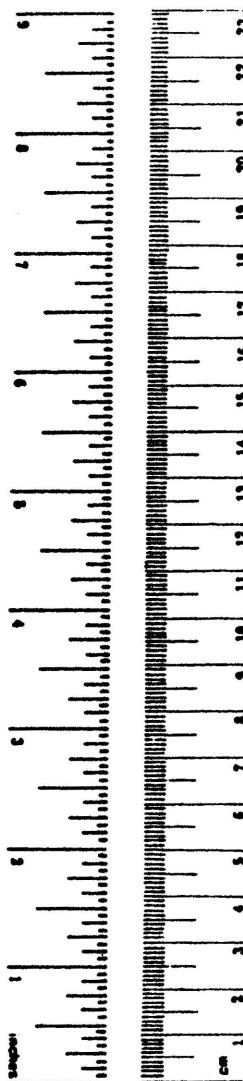
Special and particular thanks go to the research assistants, Nancy Van Valkenburgh and Lisa Townsend. They each worked diligently and faithfully during the course of the year. The daily concerns and obstacles faced were handled much easier due to their dedication to the project.

# METRIC CONVERSION FACTORS

## Approximate Conversions to Metric Measures

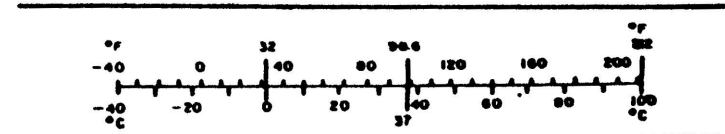
Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
<b>AREA</b>				
m <sup>2</sup>	square inches	6.5	square centimeters	cm <sup>2</sup>
ft <sup>2</sup>	square feet	0.09	square meters	m <sup>2</sup>
yd <sup>2</sup>	square yards	0.8	square meters	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.6	square kilometers	km <sup>2</sup>
	acres	0.4	hectares	ha
<b>MASS (weight)</b>				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
<b>VOLUME</b>				
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft <sup>3</sup>	cubic feet	0.03	cubic meters	m <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.76	cubic meters	m <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

\*1 in = 2.54 exactly. For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price \$2.75, SD Catalog No. C13.10 286.



## Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
km	kilometers	1.1	yards	yd
		0.6	miles	mi
<b>AREA</b>				
cm <sup>2</sup>	square centimeters	0.16	square inches	in <sup>2</sup>
m <sup>2</sup>	square meters	1.2	square yards	yd <sup>2</sup>
km <sup>2</sup>	square kilometers	0.4	square miles	mi <sup>2</sup>
ha	hectares (10,000 m <sup>2</sup> )	2.5	acres	ac
<b>MASS (weight)</b>				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	st
<b>VOLUME</b>				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m <sup>3</sup>	cubic meters	35	cubic feet	ft <sup>3</sup>
m <sup>3</sup>	cubic meters	1.3	cubic yards	yd <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



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## DEVELOPING LOCAL SUPPORT AND FUNDING FOR RURAL TRANSPORTATION

### 1.1 Introduction

This study is intended to examine the need for transportation in a small rural community, along with methods of gaining local support and funding to address those needs. The status and well-being of a category of persons, in this particular circumstance the rural transportation disadvantaged, is inextricably related to the social, economic, and cultural conditions of the society in which they live. Several important indicators of well-being are: the freedom and opportunity to interact with persons and groups of one's choice; the opportunity to pursue economic activities that can improve one's financial status; and the access to institutional services, i.e., educational, health service and leisure-time activities. Thus, in order to improve the quality of life of the rural transportation disadvantaged, accessibility to those indicators must be increased.

The range of travel modes--personal vehicles, public transit, taxi, and other modes--which may be available to populations in other types of demographic areas, usually do not exist for the transportation disadvantaged of rural areas. The need for rural public transportation has been documented and it is relatively easy to prove such need for poor and elderly rural persons. In analyzing or justifying the need for transit in purely economic terms or based on a cost benefit analysis, the results have been that demand for bus service has been too low to justify service. Since demand is measured in terms of willingness and ability to pay for bus service, the demand for rural transit will be very low, although the need may be high. This distinction has been challenged because it has been one of the primary obstacles to a formal commitment to serving isolated and transportation disadvantaged groups. The variables or characteristics most frequently used in estimating travel demand are population, family size (persons per household), auto ownership, and income per household. These are all factors which, upon being analyzed for rural areas, substantiate the need for improved mobility. Despite the probability that the private automobile is likely to remain the dominant

transportation mode in small urban and rural areas because of its convenience and it is unlikely that auto users will give up their vehicles for public transit, there still exists the need for public transit. Where transportation does exist in rural areas, it is often provided through social service agencies. All too often the agencies provide the only form of special transportation assistance available to many disadvantaged persons. The rides may be purchased from public, private non-profit or proprietary transportation providers, by program staff, public service employees or volunteers, or obtained through direct reimbursements to clients.

Common characteristics shared by these special transportation service providers include: the provision of unconventional services to transportation disadvantaged population groups and underserved areas; and the operation on the fringe of mainstream federal, state and local public transportation financing programs. The uncertainty about the continuation of such program funds and the lack of alternative funding sources still further contribute to the problems of service providers.

The financial instability under which these programs operate affects the service and the ridership potential of these systems. With new efforts and legislation focusing on the coordination of the categorical program based transportation operations which may provide for more service to a broader spectrum of the community, there still exists a need for more local support and the identification of more consistent and stable funding sources.

## 1.2 The Problem

The Census Bureau defines "rural" as being all areas outside places of 2,500 persons or more. The application of this definition places the majority of the population of Alabama within this category. Therefore the issue of rural transportation is an important one in this state.

Similar to other rural communities, the Town of North Courtland has been grappling with the problem of transportation for the disadvantaged for several years. In 1984 the Town contracted with ELJA Associates to study the transportation problem of its residents. The major output of this study was the identification of three city approaches to meeting the transportation needs of disadvantaged residents. These cities were San Juan, Puerto Rico; Fayette, Mississippi; and Huntsville, Alabama.

One of the major findings of that study was that "providers in the area are adequate enough to provide the service needed, but no major linkage network exists."<sup>1</sup> The study did not, however, identify the providers or provide any strategy whereby this linkage network could be developed.

Although such studies are needed to stimulate interest and to direct efforts, they often fall short of delivering a plan of action, a procedure for correcting the problems identified. This creates a stalemate in that often-times in rural communities the technical know-how as well as the availability of personnel to follow up on recommendations are lacking. These communities need more than an assessment of the problem, generalized statements of what they should do, and examples of how other cities are addressing the issue. Beyond these work tasks, they need alternatives specifically designed to meet their unique problems, and an evaluation of the alternative that would best meet their needs, given local constraint. Further still, they require the technical assistance to ultimately arrive at their stated goal of providing improved mobility.

Although several Federal programs provide funds for transportation service, most particularly the Section 18 Rural Public Transportation Program, many rural communities are not receiving transportation benefits and therefore are not realizing any improvement in their travel capabilities. What then are those salient issues and/or obstacles that are hindering fuller participation of rural residents in transportation programs? The two issues which the research team thought to be associated with the lack of participation were (1) the lack of a transportation advocacy group, i.e., a local support group formally established as a transportation steering committee, and (2) the identification of funds to supplement the cost of the transportation service.

This project involved a case study of a small rural community that due to several social and economic problems (the lack of adequate transportation being a one of those), is economically distressed. Most areas which can be described as such lend support to the hypothesis that there is a correlation

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<sup>1</sup>Elbert Jenkins, et al., ELJA Transportation Study of North Courtland, Alabama (n.p.: ELJA Associates, 1984).

between transportation efficiencies and a high number of economically disadvantaged people. The relationship has been described by Ornati in the following way:

What it is that makes non-workers of many of the poor overlaps with other problems of the poor. The problem of getting to where the jobs are (whether the problem is due to poor transportation or because the poor live in ghettos) is part of the larger problem of the lack of mobility of the poor. The social benefits of high labor mobility have been recognized since Adam Smith, in the Wealth of Nations, inveighed against "whatever obstructs the free circulation of labor from one employment to to another." Yet in spite of a large literature on labor mobility, the physical problem of getting to work does not seem to have been considered until the McCone Commission on the Watts Riot ascribed as a cause for the riots the difficulties that Watts-area residents had going to work.<sup>2</sup>

The status of being economically disadvantaged has carry-over into all elements of an individual's life--social, physical, and psychological. These elements, grouped as they are, determine the quality of life which the transportation disadvantaged individual enjoys.

The descriptive term frequently associated with persons who have transportation deficiencies is "transportation disadvantaged." Studies conducted on the transportation needs of residents of rural communities have indicated that those who have low incomes and no automobiles are essentially dependent for their mobility on other drivers. When other drivers are unavailable, the mobility of the carless individual is restricted; thus the reality of being transportation disadvantaged comes into full view. The transportation disadvantaged individual has been described as any non-institutionalized person who cannot carry out a reasonable level of desired activity outside the home due to age, economic condition, physical or mental handicap, or lack of vehicle or transportation service.<sup>3</sup> These persons face real difficulties in getting to medical facilities, for routine appointments, getting to job-training programs located in towns and in transporting children across

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<sup>2</sup>Oscar Ornati, Transportation Needs of the Poor, Praeger Special Studies in the U. S. Economic and Social Development (New York: Praeger Publishers, 1969), p. vii.

<sup>3</sup>Hal S. Maggied, Transportation Options for Mobility Disadvantaged in Rural Georgia (Athens, Georgia: The University of Georgia, 1979), p. 61.

town to recreational programs. In order to improve the quality of life of such individuals, the freedom and opportunity to pursue those mentioned activities must be increased.

Research designed to elevate the level of local support and the funding sources for improving transportation was considered a critical missing link in resolving the problems found in this rural area. It was, therefore, the goal of this research to increase the level of support for and the awareness of funding sources to assist a rural transportation system. The means for obtaining this goal were arrived through the following objectives:

- (1) Organizing a support group to increase, within the local community, the awareness of the need for and the benefits to be derived from rural public transportation;
- (2) Developing strategies to "sell" the concept of public transportation to the community;
- (3) Assisting the target community in developing strategies to better utilize existing resources in providing public transportation; and
- (4) Providing technical assistance to improve the means of mobility in the community.

The town of North Courtland, Alabama, provided a fertile environment to study the impact of the lack of transportation on the social, economic and physical well-being of rural residents.

### 1.3 Regional Characteristics

The regional setting relative to the current transportation research is described as a means of identifying the physical and socio-economic characteristics of the study area. This situation is similar to nearly every rural area in America located more than twenty miles from a significant metropolitan area. There are, as in every situation, areas which will evidence greater degrees of poverty, greater land areas and greater adversities than those described in this report. However, reviewing this study will find a significant number of similarities and this research report will, therefore, prove to be of significant benefit to a substantial number of rural leaders attempting to provide and/or enhance their existing transportation accommodations.

North Courtland, Alabama, is situated in the north central portion of



Lawrence County. Incorporated only since 1981, the town is part of the North Central Alabama Regional Council of Governments (NARCOG). The NARCOG planning area includes the adjacent counties of Lawrence, Limestone, and Morgan. The city of Decatur in Morgan County is the area's principal urban community. Although Morgan County's 1980 population exceeded 77,3000, the county was not designated as a Metropolitan Statistical Area. Despite the fact that the three counties evidence some degree of growth during the last decennial period, Lawrence County continued to experience out-migration. The percentage of out-migration for Lawrence County remained relatively constant at 5.8 percent between 1970 and 1980. The following table identifies certain regional population characteristics relative to the overall study area.

Table 1  
Regional Population Data (by County)

	POPULATION		% MIGRATION	% BLACK
	<u>1970</u>	<u>1980</u>	<u>1970 - 1980</u>	<u>1980</u>
Lawrence Co.	27,281	30,170	1.2	17.1
Limestone Co.	41,699	46,005	2.7	14.5
Morgan Co.	77,306	90,231	7.5	10.1

Source: ADECA, Alabama County Data Book, 1986, pp. 69, 74,75.

Twentieth Census of the United States, 1980: Population 2, p.p. 69, 74, 75.

As noted above, Lawrence County is the most rural of the three counties. As presented hereafter, it will be noted that most of North Courtland's employed residents are dependent on employment centers in Morgan County and to a lesser degree on employment opportunities in Limestone County. The extent of rurality is evidenced by the fact that the net density for Lawrence County in 1980 was 43.5 persons per square mile as compared with 156.9 persons per square mile in Morgan County. This density fell substantially below the Alabama's 76.7 persons per square mile.<sup>4</sup>

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<sup>4</sup>Alabama Department of Economic and Community Affairs, Office of State Planning and Federal Programs, Alabama County Data Book 1986, Ed. Gilbert C. Lowe (Montgomery, Alabama: ADECA, 1986), p. 70.

The following tables (2 and 3) show median family income for 1960, 1970, and 1980, as well as the percentage of families falling below the poverty level for 1970 and 1980. Again, characteristics identify Lawrence County as a rural, underdeveloped county with limited resources.

Table 2  
Median Family Income (by County)

<u>County</u>	<u>1980</u>	<u>1970</u>	<u>1960</u>
Lawrence Co.	14,689	6,089	2,376
Limestone Co.	16,303	6,820	2,988
Morgan Co.	18,276	8,360	4,289

Source: ADECA, Alabama County Data Book 1986, p. 77.

Table 3  
Percentage of Families Below Poverty (by County)

<u>County</u>	<u>1970</u>	<u>1980</u>
Lawrence	27.3	19.4
Limestone	21.7	14.0
Morgan	16.2	10.8

Source: ADECA, Alabama County Data Book 1986, p. 77.

It can be seen that both Limestone and Lawrence Counties have historically lagged behind Morgan County. The degree of poverty in Lawrence County has consistently been twice that of Morgan County and forecasts promulgated by the Alabama Department of Economic and Community Affairs within the Office of State Planning and Federal Programs have not altered this outlook. A continuing degree of lower incomes and greater poverty which have not been projected for Morgan County have been predicted for Lawrence County.

Other economic characteristics of the region evidence a further decline in the economic vitality of the area as a significant agricultural region. The following table is presented to show the number of farms in 1978 as compared to 1982 as well as respective farm income for the same period.

Table 4  
Loss of Farms and Farming Income

	<u>ALL FARMS -1982</u>		<u>ALL FARMS -1978</u>	
	NO. OF FARMS	SALES OVER <u>\$20,000.00</u>	NO. OF FARMS	SALES OVER <u>\$20,000.00</u>
Lawrence Co.	1,226	276	1,266	306
Limestone Co.	1,171	184	1,220	240
Morgan Co.	1,353	236	1,426	276

Source: ADECA, Alabama County DataBook 1986, p. 30.

#### 1.4 Target Community Characteristics

The town of North Courtland, as previously noted, is located in the northern part of Lawrence County. It was incorporated as a municipal corporation in June 1981 and, at that time, it had a population of 997 persons.<sup>5</sup> The town has an estimated 1986 population of 1,060 persons, of whom 95 percent are black based on surveys undertaken by the Alabama A & M University Center for Urban and Rural Research.<sup>6</sup> The town has a Mayor-Council form of government, has a prepared comprehensive plan, and an aggressive spirit of community cohesion and identification of a black cultural center, the surfacing of all of the formerly dust-ridden streets, the installation of a sanitary sewer system and the establishment of an active recreation commission.

Physical characteristics of the town have shown that the flat topography has created drainage problems covering in excess of 300 acres of land within the town's corporate boundaries. This flooding is caused from high runoff from

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<sup>5</sup>Alabama A. & M. University Center for Urban and Rural Research, Comprehensive Plan: North Courtland, Alabama Normal, Alabama: Alabama A. & M. University, 1982), p. 8.

<sup>6</sup>Ibid., p. 9.

lands to the south of North Courtland causing Nance Creek to overflow its banks. All natural flow of water is to the north into the Tennessee River. The lands surrounding North Courtland to the north, east and west are predominantly agricultural with cotton as the predominant crop.<sup>7</sup>

The major employer in the North Courtland area is Champion Paper Company located three miles north of the corporate limits. Other employers in Lawrence County typify rural economies with the inclusion of marginal textile and poultry processing plants in Moulton, county seat of Lawrence County. However, based on surveys undertaken as part of this research program, it was determined that the major employment center was Decatur for residents of North Courtland. Figure 1 illustrates the sampled labor force travel patterns.

The fact that the town's racial composition is 97 percent Black is of importance. As early as 1965, the McCone Commission recognized that inadequate and costly transportation creates a significant barrier to the employment of the poor when its report identified the many factors which contributed to the high unemployment rate of minority groups. This lack of adequate transportation handicaps the poor in seeking and holding jobs, shopping, and in fulfilling other needs.<sup>8</sup> It has a major influence in creating a sense of isolation, with resultant frustration.

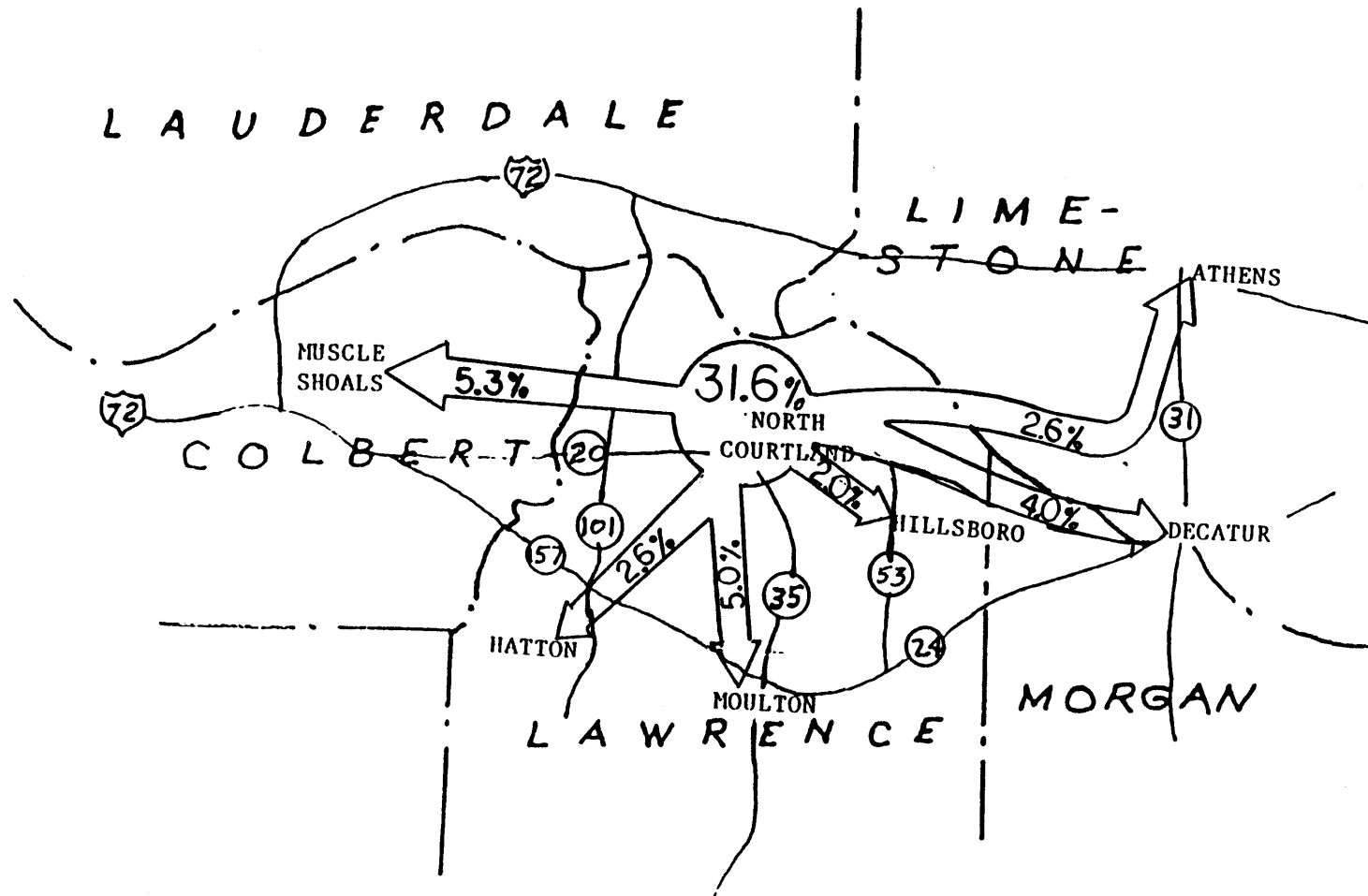
To determine travel patterns, attitudes, and needs for transportation in North Courtland, a survey was conducted. The aim of the survey was to provide basic information regarding the following: (1) how people transport themselves, (2) where they go, and (3) if they would use a transportation system if it were available. The answers to these indicators would determine the design and type of service needed.

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<sup>7</sup>Tennessee Valley Authority, Division of Water Control Planning, Floods on Big Nance Creek in vicinity of Courtland, Alabama, Report No. 0-6291 (Knoxville Tennessee: TVA, 1963), pp. 6-7.

<sup>8</sup>"Violence in the City--An End or a Beginning?," Governor's Commission on the Los Angeles Riots, 1965, as cited by John C. Falcocchio and Edmund J. Cantilli, Transportation and the Disadvantaged (Lexington, Mass.: D.C. Heath and Company, 1974), p. 6. n. 7.

# LABOR FORCE TRAVEL PATTERNS



\*workers in undesignated locations 7.9%

## 2.0 SURVEY OF TRANSPORTATION NEEDS

### 2.1 Analysis

The survey identified specific trip purposes, current work trip patterns, and a variety of sociological parameters. A representative sample of one household in three was selected to be interviewed. Since the population of the town was estimated to be 1,060 divided into households of 3.1 persons, 113 questionnaires were prepared. The town was divided into seven sectors and each of the seven interviewers took 16 questionnaires to administer. The interviewers went to every third house in their sectors until 16 houses had been canvassed. Those residences in which no one was home were counted into the total. The survey team collected responses from 44 households. It should be noted that the survey was conducted during midweek, midmorning hours in April 1986. Consequently, the respondents tended to be the transportation-disadvantaged segment of the population with which the study is concerned. Working with the 44 responses as representing 100 percent of the sample, representative percentages were calculated.

Special sociological parameters measured included unemployment, mode income range, percentage of elderly, percentage of handicapped, and percentage of poverty households. The survey determined that 16.7 percent of the respondents were unemployed. (This compares to 11.1 percent unemployment for Alabama and 15.1 percent for Lawrence County.<sup>9</sup>) The mode income was found to be under \$5000 per family. Elderly persons over 65 years of age composed 14.4 percent of the responding households. Physically handicapped persons represented 4.6 percent of the population. According to 1984 figures representing weighted average poverty levels for families and unrelated individuals, 68.2 percent of the respondents live in poverty households.<sup>10</sup> Current transportation modes were investigated in the survey. Among the questions asked were those about number of cars and drivers in the household. The 44

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<sup>9</sup>Alabama Department of Economic and Community Affairs (ADECA), p.66.

<sup>10</sup>U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States: 1984 (Washington, D. C.: U. S. Government Printing Office, 1984, p. 430. This number was derived by applying weighted average poverty levels to survey responses on income and family size.

respondents indicated that 18 of their households were carless; therefore, 40.9 percent were without a car. There were 10 households (22.7 percent) which reported ownership of one car. The remaining 16 households (36.4 percent) indicated multiple-car ownership. The most prevalent means of transportation in North Courtland is the privately-owned automobile, followed by a neighbor's car, walking, and the Area Aging Agency van in descending order. No respondents used bicycles or motorcycles for transportation.

The respondents were questioned about employment of their households. It was found that 17 percent of the persons living in the households were employed. Employment sites outside Lawrence County predominated. The largest employment numbers were reported for workers in Decatur where 15 residents worked. This contrasts to the reported employment in North Courtland/Courtland of 12 workers. Only two workers listed worked in Moulton, the Lawrence County seat, which is located 20 miles from North Courtland. Decatur, the seat of Morgan County, is also 20 miles from the town. Two additional workers were reportedly commuting to Muscle Shoals in Colbert County, also approximately 20 miles away. Clearly, significant travel is involved for workers living in North Courtland.

When asked about public transportation needs, the respondents stated they would use it for the following purposes, ranked in descending order: (1) medical trips, (2) shopping trips, (3) work trips, (4) school or daycare trips, and (5) other purposes such as recreation, job-seeking trips, and church. All respondents indicated that they would use the transportation if the services were available. The survey instrument is shown in Appendix A.

A study performed in 1984 by ELJA Associates<sup>11</sup>, a private consulting firm, for the Town of North Courtland yielded similar responses to those gathered by the Alabama A & M research team. While work trips were the most prevalent type of trip in the community, the ELJA study found that users of public transportation ranked work transportation a very low need. The ELJA report further indicated that most people in the North Courtland area make only three or four trips from their homes per week and both the ELJA and Alabama A & M surveys found that the transportation disadvantaged citizens desired transportation to Decatur and to Moulton, Alabama.

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<sup>11</sup>Jenkins, p. 7.

After the Alabama A & M survey was conducted in April, transportation services for kidney dialysis patients in the area were discontinued due to budgetary restraints of Lawrence County. This critical situation further added to North Courtland's need for improved public transportation.

The surveys substantiate the findings of Falcocchio's study of the transportation disadvantaged which illustrated how all the groups, -- elderly, handicapped, young and poor -- are interrelated. The young may have no other disadvantage, or they may be young and handicapped, or young and poor, or young, handicapped and poor. The same relationships could exist for the other groups. In sum, the transportation problem is one defined by two handicaps: financial or physical restrictions.<sup>12</sup>

The Falcocchio study further indicated that the poor, aged, young, and handicapped represent the members of the population who are at the fringes of the total population in one way or another. The poor do not partake of the ability most people have for free decision in transportation matters because of financial restraints. The handicapped do not partake of that element of free decision because of physical limitations. The aged are affected on both scores: their financial circumstances are reduced and as a result they become part of the poverty group. In addition, their physical capacities to a great degree become restricted, making them to some extent part of the handicapped group. The young are considered disadvantaged in that they are in a period of life which they cannot chose their mode of transportation primarily due to lack of fund or public options.<sup>13</sup> Figure 2 illustrates the pattern of overlap of transportation disadvantaged groups.

Based on the Alabama A. & M. survey, the major employers in the area are located in Courtland, Decatur, Moulton, Muscle Shoals, Athens, Hatton, Town Creek, and Hillsboro. Decatur, Alabama, is the largest single employment center for the region, and provides 40 percent of the surveyed employment opportunity to North Courtland. It is located 20 miles from the town. The major work sites in Decatur are Monsanto Chemical Company, Saginaw Steering Gear, and Goodyear Tire and Rubber Company. Courtland, located 4 miles from

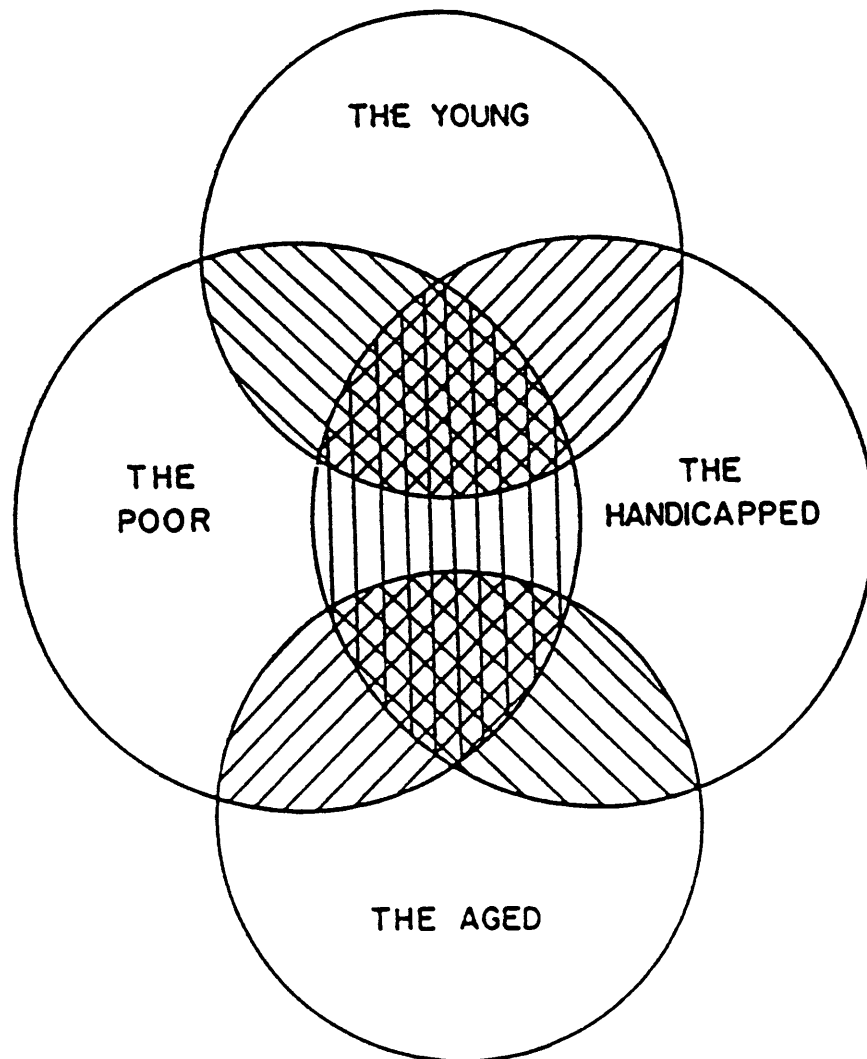
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<sup>12</sup>Falcocchio, p. 5.

<sup>13</sup>Ibid.



FIGURE 2  
OVERLAP OF TRANSPORTATION DISADVANTAGED



Source: John C. Falcocchio and Edmund J. Cantilli, Transportation and the Disadvantaged, 1974, p. 6.

North Courtland, is the second largest employment center. It provides jobs to 34 percent of North Courtland's surveyed labor force. The major employment site in the immediate area is Champion Paper Company. The third and fourth largest employment centers are Moulton and the Tri-Cities<sup>14</sup>, which each provide jobs to 5.7 percent of North Courtland's sampled labor force.

In analyzing North Courtland's employment center location distribution, it was determined that 68 percent of the labor force reportedly works outside of the incorporated town. The labor force distribution is shown on Figure 1. Less than 32 percent of the workers have jobs within a five to ten mile work trip of the town.

Table 5  
SURVEY RESULTS

Courtland/North Courtland	31.6%
Tri-Cities	5.3%
Decatur	39.5%
Moulton	5.0%
Hillsboro	2.6%
Hatton	2.6%
Town Creek	2.6%
Athens	2.6%
Others	7.9%

The following observations can be summarized from the survey results:

- 1) A significant number of the residents do not own a vehicle.  
(Slightly less than 50%)
- 2) A majority of the respondents indicated that the family had one vehicle, but that they (the respondents) had no access to the car during all, or a large portion, of the day.
- 3) Trips which one-vehicle households needed to make had to be delayed or not made due to the lack of transportation during working hours.

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<sup>14</sup>Muscle Shoals, Tuscumbia, and Sheffield are the Tri-Cities.

- 4) The lack of transportation to major employment centers has impaired some citizens' ability to attain employment.
- 5) This lack of transportation has similarly impaired the search for employment among those who are physically able to work.
- 6) The health care needs of the residents may be suffering due to the lack of transportation to medical facilities.

### 3.0 INVENTORY OF TRANSPORTATION PROVIDERS

#### 3.1 Coordination in Rural Public Transportation

At a time when the Federal Government is placing increased emphasis on local initiatives, the rural communities must learn to plan innovated means for providing the most cost-effective transportation service for their citizens. In the rural areas, there is a woeful lack of supply of transportation services available. The service which is available tends to be too expensive and basically inefficient and inflexible. The objective of transportation planning in rural areas must be the efficient allocation of the scarce transportation resources which are available. Through coordinated efforts, transportation mobility for transportation disadvantaged citizens can be improved and increased.

The Alabama A. & M. research team undertook this transportation study in an effort to assist the Town of North Courtland in achieving improved transportation mobility for its residents. As a small, rural, predominately Black community, the need for assistance was great. The team concluded that service would be improved by utilizing existing services as interim means to aid the residents until a more complete alternative could be implemented.

A needs assessment survey established that trips to the major commercial service centers Decatur, Muscle Shoals, and Moulton (the Lawrence County seat), were necessary for medical, governmental, shopping, and other purposes. Each of these centers is located approximately 20 miles from North Courtland. The structure of the existing system of transportation providers within the area was examined. Through looking at existing transportation patterns and services, the research team was able to determine what existing resources could be developed so that the North Courtland community could be better served.

In Lawrence County, The Section 18 Program of the Urban Mass Transportation Act of 1964 is administered through the Lawrence County Commission. The Commission manages transportation services within the county through its Lawrence County Public Transportation Company (LCPTC) which operates as an umbrella agency for the distribution of transportation vehicles. The LCPTC currently is responsible for 16 vehicles in its system. These vehicles are operated by the following agencies: Area Aging Agency, Tennessee Valley Rehabilitation Center, Community Action Agency, Lawrence County Day Care (Headstart), and the Center for the Developmentally Disabled.

### 3.2 Coordination with Agency Providers

In order to assess potential available service of existing programs for the residents of North Courtland, the Alabama A. & M. research team established communication with several agency transportation providers.

Meetings were held with the Director of the Lawrence County Section 18 Program at the Lawrence County Commission office in Moulton, Alabama. The Director explained the overall program and its structure as it is administered through that office. The advantages an affiliated agency has by operating its service through the auspices of the LCPTC were pointed out. These advantages currently include administration at no charge to the agency and insurance at a reduced cost through the lower rate available to the County.

The Morgan-Lawrence County Community Action Agency (CAA) office is located in Decatur, Alabama. The research team visited its office and investigated its role in transportation provision for the area. The CAA is the recipient agency for Morgan County's Section 18 transportation funds, whereas the Lawrence County Commission receives Section 18 funds for Lawrence County. A transportation coordinator oversees the operation of the entire transportation effort for the CAA. Because Section 18 permits the agency to provide service solely to Morgan County, the system can only operate to the Morgan County border. The coordinator posed the possibility of coordinating with any Lawrence County transportation provider that could transport passengers to the Lawrence-Morgan County border so that service could be available in both Morgan and Lawrence Counties.

Under the auspices of the CAA, the Headstart Program for Morgan and Lawrence County is under a single directorship in Decatur, Alabama. The study team learned that Headstart provides service to approximately 75 children and operates 5 vehicles. The system has four 24-passenger buses and one 18-passenger van. The vehicles are driven by teachers' aides and the U.S. Department of Health and Human Services pays for their services. Because the teachers' aides are the insured drivers for the Headstart program, the vans are idle during the day between 6:30 a.m. and 2 p.m. weekdays and on the weekends. As a result of the driver limitation, the vehicles are not available to use for other purposes such as short trips for the residents of rural communities. The children of North Courtland are transported by Headstart to Town Creek to the Lawrence County Day-Care facility on a vehicle which picks up throughout the area.

The Area Aging Agency (AAA), coordinated from Moulton, Alabama, operates a senior center in North Courtland and provides transportation for this center. The vehicle is used by the center on weekdays from approximately 9 a.m. to 3 p.m. for transporting clients to the center. The vehicle is further used from 11 a.m. to 1 p.m. to home-deliver meals for the Meals-on-Wheels Program. The driver takes the vehicle to Moulton twice a week for routine maintenance and clients occasionally ride to Moulton to take care of business on those trips. This is a resource which is available to other North Courtland residents because the AAA vehicle receives Section 18 funds. Regulations require that recipients of the funds provide transportation to the public. Before the current Alabama A & M study began, the residents of North Courtland were not aware that this resource was available within their community. The survey team indicated that the North Courtland Transportation Steering Committee could alert the community to such resources by advertising the information.

The Tennessee Valley Rehabilitation Center (TVRC) is a multi-county facility which is headquartered on the campus of Calhoun Community College in Decatur, Alabama. The Center operates three 40-passenger buses to transport its clients and Calhoun College students to the campus. Lawrence County is served by one bus which is garaged in Moulton. The drivers are students who are insured by the TVRC. The bus leaves Moulton each weekday morning at 6:45 a.m., travels U.S. Highway 20 near North Courtland, and arrives at the campus in Decatur at 7:45 a.m. The bus is then parked in a bus barn where it remains until 3 p.m. when it is driven back to Moulton. The bus belongs to the TVRC and is operated with assistance which includes both United Way and Section 18 funds. The team learned that TVRC had recently solicited operating fund assistance from the City of Moulton because of the great expense involved. The TVRC is considering altering its route to a location nearer Decatur. The prospect of some coordination of service via North Courtland was discussed with a Center representative. Some interest was expressed in TVRC's providing some service for North Courtland and receiving some financial support in return. As was noted above with the AAA, Section 18 requires that its recipients provide transportation for the public. The Transportation Steering Committee should consider coordination with the TVRC for some feasible transportation service.

### 3.3 Coordination of State Officials, the Private Sector and Local Interests

In Alabama, the Section 18 Program is administered by the Bureau of Urban Planning of the Alabama Highway Department. State planners have been very supportive of the efforts of the North Courtland Transportation Steering Committee and the Alabama A. & M. research team. They have answered numerous questions, provided needed manuals and examples, and attended meetings of the Steering Committee and the research team. State representatives attended the initial meeting of the Steering committee with area transportation providers. This meeting provided an information exchange about programs available, current programs in operation, problems to be resolved, and examples of how some rural transportation problems were being handled. Contacts made were used throughout the study to provide relevant information.

During the course of the study, the Alabama A. & M. research team was able to attend two programs sponsored by the Alabama Transit Association. These contacts provided the opportunity for informal discussions with provider agency representatives and state planning officials.

At the request of the State planners, a meeting was held at the Lawrence County Commission office to brief Lawrence County providers, agency administrators, and the Alabama A. & M. research team on the Section 18 Program. This meeting gave all representatives an opportunity to have input to the planning process and to have questions answered. A major concern raised by a North Courtland representative at the meeting was the need of kidney dialysis patients in North Courtland and throughout Lawrence County for transportation to medical facilities. Budgetary constraints had necessitated discontinuing the van and part-time driver that had provided this service under Section 18 funding. Information on alternative funding for these services was needed by the County. The study team learned that the Kidney Foundation was managing a grant from the Alabama Department of Pensions and Securities for the coordination of transportation for dialysis patients. Consequently, the study team was able to coordinate this information between the Kidney Foundation of Alabama and the Lawrence County Commission office. Although there are only a few dialysis patients in Lawrence County, this linkage should be useful in reducing unmet transportation needs.

To involve the private sector in the North Courtland study, representatives of the Yellow Cab Company of Decatur were invited to the initial meeting

of the North Courtland Steering Committee. The owners of the company attended and told the Committee about the services the cab company could provide. They indicated that they would like to contract with North Courtland for transportation services. They pointed out that their company is licensed with the Alabama Public Service Commission and that they could provide rides within a 200-mile radius of Decatur. The point was made that individuals of North Courtland could take advantage of savings afforded them by sharing a cab and dividing the cost. The North Courtland Steering Committee should further investigate contracting as an interim means for improving North Courtland's transportation.



## 4.0 LOCAL SUPPORT

### 4.1 Establishing Transportation Steering Committee

The survey results supported the initial hypothesis that the local situation required improved transportation services for those who were disadvantaged. In order to increase community support for the concept of public transportation, a steering committee was formed with persons representing the operators of transportation programs, funding agencies, administrators, local elected officials, private operators and grass roots citizens.

Organizing a group of local residents to assist in the further identification of transportation needs and the resources which may be available to improve mobility was a key link in the research and planning process. The commitment of such a group was determined to be essential if fruitful results were to be realized. Outsiders, such as the research team, could make assessments by surveying the target population, but the knowledge of local residents provided a more complete picture of the impact which the lack of transportation was having on the economic and social aspects of residents' lives. In addition, the knowledge of those who are providing service and administering transportation programs was invaluable in designing a rational approach for addressing transportation needs. An initial meeting was held with the Mayor of North Courtland, Alabama, the Honorable Fred James. The Mayor's approval and support of the research study had established that this meeting would identify citizens to serve on the steering committee. With the Mayor's assistance, a local citizen was identified who had expressed her concern regarding the lack of transportation and had formerly been involved in transportation service while an employee of the Community Action Agency. With her knowledge of the issues that would have to be addressed by the Committee, she was invaluable in identifying persons to serve and explaining what the committee's role would be.

Getting the input of those citizens whose mobility was restricted due to the lack of some means of transportation was important. The nature of the problems and concerns which they brought out in committee discussions were valuable to the research goal of designing a system that would complement their lifestyles and travel behaviors.

Letters explaining the research to be undertaken, along with an invitation to attend the first steering committee meeting, were sent to the local residents identified by the chairperson. The same information and invitation was also sent to the locally elected officials, the transportation providers in the immediate area, and to the Alabama Highway Department.

The decisive role of the Transportation Steering Committee was to plan, with the technical assistance of the research team, a logical and well-thought-out approach for improving transportation for the disadvantaged in the community. To that end, the Committee formulated a goal to set the direction for the development of two plans for improved transportation service. The following goals and objectives were established:

Goal: To provide improved mobility to all potential transportation disadvantaged (i.e., elderly, handicapped, young, carless), without resulting in a heavy burden (i.e., economic impact) to those citizens who will not use the system.

- Objectives:
- (1) Provide maximum mobility (maximum defined as being most the efficient and economical) to the transportation disadvantaged in the community;
  - (2) Maximize the ease of system implementation on system providers;
  - (3) Maximize positive benefits to non-disadvantaged and the community as a whole by improving the employment potential through carpool/vanpool service and other economic derivatives of transportation service.

In order to evaluate transportation service alternatives, the Committee had to rank or weigh the value of alternative objectives. Weights were assigned to the three objectives. This allowed each alternative to be ranked according to how well it would achieve the overall transportation goal and

objectives for transportation service. The following weights were assigned the objectives:

<u>Objectives</u>	<u>Weights</u>
1	3
2	2
3	1

The Committee agreed that mobility improvement must be realized in the community. They felt that the quality of life of the transportation disadvantaged residents could not be improved unless mobility to the maximum extent feasibility was improved.

The ease of the implementation of the system would provide a more timely response to the transportation problem. Therefore, objective number two received the second highest weight.

The third objective, which was considered to be highly desirable, was weighted lowest due to the pressing needs of transportation for all trip purposes by a large percent of the general population.

The heart of the transportation problem which required input from the Steering Committee was, "What types of transportation service would be required to meet the needs of the residents, and how could a transportation program be designed so as to improve the quality of life for the disadvantaged while being economically efficient to the users and the community?" Input from the committee was solicited to assist the research team in measuring the concept of community cohesion. This variable represented by several proxies helped in measuring aspects of life which have been identified as having importance to transportation disadvantaged groups.

Using Falcocchio's measures of community cohesion, the local members of the Steering Committee were questioned to determine the local situation in regard to the following concepts:<sup>15</sup>

- 1) Extent of pedestrianism
- 2) Location and accessibility of community facilities
- 3) Amount of "neighboring" and mutual help
- 4) Knowledge of other individual families/individuals within a given area.
- 5) Recognition of geography of the area.

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<sup>15</sup>Falcocchio, p. 21.

The members of the Committee were able to give examples of specific transportation problems of which they were aware. The most frequently cited examples were transportation to medical facilities and to employment locations. Those who have no car rely on neighbors, friends, and relatives for transportation. In some instances the costs of these trip were at a premium. A cost of \$15.00 was quoted for the price of a twenty-mile round trip to pick up food stamps. For a low-income individual or one on a fixed income, this represents a significant percentage of their income.

The Committee members also stressed the need for transportation for shopping purposes. Convenience store shopping was available within walking distance to most of the residents of the community. However, major grocery and retail store shopping required transportation.

## 5.0 DEVELOPMENT ALTERNATIVE

From meetings with the Transportation Steering Committee, three conceptual systems were proposed. The characteristics of each are discussed below.

### 5.1 Alternative I

The Transportation Steering Committee would assume a major responsibility for the planning and implementation of service.

#### System Design

This system would be structured to respond to a sustained level of demand within a narrowly defined geographic area. The natural transportation service areas had been explored and were generally within a 15-20 mile radius of the city. The service area would be split into manageable service zones, like wedge-shaped sectors of a pie. Such a division would provide maximum transit service delivery.

#### Scheduling:

Transit service would be scheduled for each service area once or twice a week or alternative days. (If work trips were found to be desired, this would require daily service). The system would eventually operate on a point-to-point demand responsive basis. As pattern demands became sufficiently distinct, a semi-routed operation could be utilized. The idea of a point-to-point system might continue to be necessary due to the fact that the segment of the population with critical mobility limitations, such as the elderly and handicapped, might need such a system in order to benefit from the transportation service.

#### Vehicle:

The system would operate through use of small, cost-effective vehicles such as 16-passenger vans or 25-passenger minibuses. A minimum of two vehicles would be needed in order to assure a backup facility for the continued service.

#### Funding:

Capital Cost 80% Federal

20% Local Match

Eligible Items--vehicles

Administrative Cost 80% Federal

20% Local

Eligible items--employees, coordinators, bookkeepers, and secretaries, facilities and equipment: All necessary and verifiable as essential to prudent project administration.

Operating Cost 50% Federal

50% Local

Eligible items--employees; drivers mechanics, and dispatchers; other items = fuel, maintenance, oil, insurance, licensing fee, and tires.

#### 5.2 Alternative II

#### System Design:

The Lawrence County Commission has been designated the implementing agency for the the Section 18 Rural Transportation Program for Lawrence County. As such, it develops and submits the transportation projects to the State for funding. Under this concept of scheduled services, the town would submit an application to the Lawrence County Public Transportation Company for a vehicle that would be operated through that agency but would serve the public transportation needs of the residents of North Courtland. The decision regarding the type of service, its frequency, and how it would be operated would remain in the hands of the local residents through the Transportation Steering Committee.

#### Scheduling:

The State's emphasis on operation of Section 18 vehicles is on work trips. With this focus in mind, the system could potentially be designed to carry work trips between 6-8 a.m. and 3-5 p.m., and during the off-peak hours to provide trips for shopping, recreation, and business. The work trip fare could subsidize the operating cost of the public transportation service.

The scheduling procedure, with the exception of work trips, would be the same as for Alternative I. Under this concept, the vehicle would be subcontracted to the Town of North Courtland. The Lawrence County Public Transportation Company (LCPTC) would provide the services described below.

#### Vehicle:

The system would operate through the use of a van or minibus. Cost of new van would be \$14,000. The Town would provide 20 percent of the capital cost, with the remaining 80 percent provided by Federal funds. The Town's capital cost was estimated to be \$2,800 per vehicle.

Under this option, the Town would realize a savings on administrative costs. The Lawrence County Commission picked up the local 20 percent administration contribution by providing centralized administration contribution by providing centralized administrative services to its agencies.

The operating costs, which include employees, drivers, mechanics, dispatchers, fuel, maintenance, oil, insurance, and licensing fees, would also be reduced. The insurance, for example, was obtained through the County at a reduced rate because of the volume of vehicles insured under the County's coverage plan.

### 5.3 Alternative III

#### The Taxicab: Private Enterprise in Public Transportation

Over the past 10 years an increasing number of taxi companies have become providers of publicly sponsored and subsidized transportation services. In contrast to the mass transit industry, taxi industry involvement in public transportation has occurred not through public takeover and direct subsidization, but through service contracts between public agencies and taxi companies. For some companies, such contracts have become an essential element of their economic survival.

The stance taken by the current Federal administration is to place more emphasis on the private sector in order to reduce federal involvement and expense while strengthening private enterprise. The use of taxi firms as public transportation contractors represents an alternative approach to public service provision. Rather than transform private enterprise into a public

organization for transportation service delivery, this approach retains the private sector character of the public transportation provider and allows for many of its activities to be purely private-market oriented. This strategy for providing public transportation service deserves serious consideration.

Taxi company involvement in public transportation is occurring at a time when the taxi industry is experiencing its most serious economic malaise since the depression of the 1930's. Some industry observers question the ability of many small and medium sized companies that do not operate in large cities to survive over the long run.<sup>16</sup>

The increasing use of taxi firms as public transportation providers raises the questions of (1) does this use of private enterprise by the public sector make possible more cost-effective public transportation services, and (2) will this use help maintain an economically viable private sector taxi capability.

During the course of this study, contacts were made with the Yellow Cab Company of Decatur, Alabama. Representatives of the company attended a meeting of the North Courtland Transportation Steering Committee to discuss provision of some transportation for the citizens. The arrangement can be seen as having positive effects on both the private and public sectors. For the Town of North Courtland, the advantages of such a systems are as follows:

- 1) Transportation service can be improved with minimal financial investment on the part of the Town through the use of Section 18 funding to pay for rides rather than equipment. With taxi service to cover at least a portion of the transportation needs, the Town will not be obligated to tie up so much of its limited capital in the purchase of vehicles. Through a contract agreement for an established number of trips per period, the taxi company would have predictable income and the passengers would have flexible transportation service available. While it is recognized that this arrangement would not in itself be sufficient to serve the total public transportation requirements of North Courtland,

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<sup>16</sup>Roger Teal, "Private Enterprise in Public Transportation: The Case of the Taxi Industry," Transportation Quarterly, 39 (April 1985), 235-36.



it could be used in conjunction with other alternatives to improve the transportation mobility of the citizens.

- 2) The start-up time of the system could potentially be shorter than that associated with a public service system.
- 3) The administrative task could be substantially reduced in comparison to other style systems.

Few differences exist between Alternative I and Alternative II with the exception of the level of autonomy associated with each option. Alternative I calls for the Town to apply for the vehicle through the Lawrence County Commission, but the association with that umbrella system would end there. The Town would carry out all administrative task associated with the system. Whereas the systems currently under the umbrella of the Lawrence County Public Transportation Company have all administrative costs picked up by the Commission, an autonomous system run by the Town of North Courtland would require the Town to contribute 20 percent of the administrative cost. Federal sources would pay the remaining 80 percent administration.

Another point which must be raised is that of a backup vehicle which must be available to the Town if service is to be reliable and available consistently. The Town, as an autonomous transportation provider, would need two vehicles, necessitating the 20 percent local contribution match for two vehicles. Systems which currently operate under the Lawrence County Public Transportation Company also purchase their insurance through the Lawrence County Commission. With insurance of vehicles being one of the most costly items associated with transportation service, this is a big asset to those providers. As an autonomous provider, the town would be required to pay the insurance for each vehicle which they operated. The local match per vehicle for public transportation is approximately \$3,000.<sup>17</sup>

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<sup>17</sup>Personal interview with Thomas Brown, Public Transportation Coordinator, Huntsville Department of Transportation, Huntsville, Alabama, 3 Nov. 1986. November 3, 1986.

The Taxi Service Option would provide service in a demand-responsive manner. The level of service would be set at a predetermined rate or number of rides. The concept of public transportation availability would be lessened by the fact that a system would not be in place. This option was viewed by the Committee as being the least desirable, and the one which would not best address the goal and objectives stated at the beginning of the study.

## 6.0 SELECTION OF TRANSPORTATION OPTION

### 6.1 Evaluation of Alternatives

The cost-effectiveness approach has been described as the most suitable evaluation technique for small communities. Its principal advantage over other techniques is that it depends on a definition of benefit or value explicitly stated by the community and opens the analysis to introspective judgement by policymakers.<sup>18</sup>

The evaluation process involved estimating the cost factors of those items that would be effected by the choice of either Alternative I or Alternative II. The Committee agreed that Alternative III would be pursued only as a supportive element to the public transportation system.

#### Alternative I (Cost Estimate)

Local Cost of Vehicles = (One-time Capital Cost)	\$5,600 @ Cost of \$2,800 each
x 2	
Local Cost of Insurance = (Per Year)	6,000 @ Cost of \$3,000 each
x 2	
Local Administrative Cost = (Per Year)	1,000
	<hr/>
ESTIMATED TOTAL COST	\$12,600

#### Alternative II (Cost Estimate)

Local Cost of Vehicle = (One-time Capital Cost)	\$2,800
Local Cost of Insurance = (Per Year)	3,000
Local Administrative Cost = (Per Year)	0
	<hr/>
ESTIMATED TOTAL COST	\$5,800

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<sup>18</sup>Others include benefit-cost ratio, rate of return, return on investment, net present value, annual cost method, and variations of these. Peat, Marwick, Mitchell & Co., et al., Analyzing Transit Options for Small Urban Communities. 3 vols. (Springfield, Virginia: National Technical Information Service, 1978), vol. 2: Analysis Methods, p. 6.

Each alternative was ranked by the Committee based on how well each would meet the previously established objectives. The ranking process was on a scale of 1-5, with 5 being the highest score. The consensus of the Committee was as follows.

#### Ranking of Alternatives

	Alternative I	Alternative II
Objective 1	2	5
Objective 2	2	3
Objective 3	4	4

Table 6 illustrates the evaluation process used in ranking the alternatives.

Alternative II dominated in the ranking process. Alternative I was more costly and ranked lower in regard to meeting the objectives. Given the budgetary constraints the Town faces, it was agreed that Alternative II would be the best alternative to pursue.

#### 6.2 Implementation of Selected Alternative

The Town of North Courtland, guided by the Transportation Steering Committee, agreed to submit an application through the Lawrence County Commission for a Section 18 Rural Transportation Grant to the Alabama Highway Department. The routing of the system would be based on the survey results which indicated that doctor visits and shopping were the priority trip needs in the community. The details of intracity routing would be determined by the Steering Committee, with input from the local citizens. Given the county line restrictions associated with the operation of a Section 18 Program, the travel-desire lines which crossed into adjoining counties suggested by the survey could not be satisfied by the transportation service to be established.

Table 6

Evaluation Process

	(Obj. 1) ( rank )	x	(Obj. 1) (weight)	+	(Obj. 2) ( rank )	x	(Obj. 2) (weight)	+	(Obj. 3) ( rank )	x	(Obj. 3) (weight)	=	TOTAL SCORE
Alternative I	2	x	3	+	2	x	2	+	4	x	1	=	20
Alternative II	5	x	2	+	3	x	2	+	4	x	1	=	30
Objective 1:	Provide maximum mobility (maximum defined as being the most efficient and economical) to the transportation disadvantaged in the community.												
Objective 2:	Maximize the ease of system implementation an system providers.												
Objective 3:	Maximize positive benefits to non-disadvantaged and the community as a whole by improving the employment deriviates of transportation service.												

To better address the travel desires expressed by the residents responding to the survey, the research team discussed the possibility of coordinating trips into the city of Decatur with the Community Action Agency's (CAA) public transportation coordinator. The coordinator agreed that a plan could be worked out to coordinate North Courtland trips in such a way that travelers could be brought to the county line and transferred to CAA vans in order to reach destinations in Decatur.

The commitment of the local residents and the local elected official to the goal of improved transportation was necessary to determine the level of local match support that the town would be willing to provide. With input and a commitment from the Mayor, the Steering Committee agreed to request that the City Council identify within the budget sources of funds which could be used to meet the local match requirements for capital and administrative costs. The Town of North Courtland, given the social and economic characteristics, has few local revenue sources from which funds could be drawn. However, the Leahy Bill passed by Congress in December 1985 states, "For the purpose of this subsection, the term federal funds or revenues does not include funds received by a recipient of funds under this section pursuant to a service agreement with a state or local social service agency or a private social service organization."<sup>19</sup> This bill provides a promising avenue of opportunity for identifying funds that could be used from the Town's budget to support a transportation program. The enacting of this bill permits the city to use Federal funds which had been "laundered" as the full local match for Section 18.

In addition to Federal sources, the Town was encouraged to pursue the potential of a variety of funding sources which various program sponsors in Alabama had used for similar purposes. These included the following:

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<sup>19</sup>Robert H. McManus, Administrator for Grants Management, U. S. Department of Transportation, Urban Mass Transportation Administration, Memorandum, 5 March 1986.

#### State Sources:

- (1) Direct increases in budget allocations
- (2) Special funds or grants
- (3) Bond increases
- (4) Special taxes (sales, fuel, parking, property, utility, etc.)
- (5) Lotteries

#### Local Level:

- (1) Property tax
- (2) Motor vehicle tax
- (3) Tax on gross receipts of parking lots
- (4) Gasoline
- (5) Transaction and use taxes
- (6) Highway fund allocation
- (7) Cigarette tax
- (8) Ad valorem tax
- (9) Business license tax
- (10) Utilities tax
- (11) Membership fares

#### Private Sources

- (1) American Red Cross
- (2) Easter Seal Society
- (3) United Cerebral Palsy
- (4) Muscular Dystrophy
- (5) American Cancer Society
- (6) Local religious groups
- (7) United Fund
- (8) Business and industry<sup>20</sup>

The Town was also encouraged to investigate the idea of selling advertising space on the vehicle once it began operating to help subsidy the

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<sup>20</sup>Lorin A. Baumhover, et al., Planning Transportation for Elderly-Handicapped Alabamians (University, Alabama: University of Alabama Center for the Study of Aging, 1980), p. 40.

cost of the service. This concept has proven to be beneficial in many communities throughout the country. (Appendix C provides a sample contract used by the West Alabama Health Services, Inc.)

To offset the operating cost further, the idea of utilizing the van during peak work hours to transport employees to work sites was presented. To measure the community's desire for such service, a questionnaire was developed for the Steering Committee to administer to the local residents (Appendix D). Work trips through van pooling could not only pay for themselves, but also provide excess funds that could subsidize the lower- revenue producing trips, i.e., shopping, medical, transporting disadvantaged groups, during off peak hours.

### 6.3 Advertising Approaches

An essential element to the success of the transportation program is getting the message out through advertising. The objectives for creating an advertising plan are to increase public awareness and ridership. Those techniques which have been most effective in improving public awareness include the following: newspaper ads, radio ads, brochures/pamphlets, direct mail, presentations to community groups, ad buses, community activities, map posters. The following techniques were found to be most effective in increasing ridership: newspaper ads, television ads, discount coupons, map posters, user guides.<sup>21</sup>

Another task which the Transportation Steering Committee will be required to undertake is the marketing of the transportation service. Marketing campaigns are created generally to achieve these three basic objectives:

- (1) Expand public awareness and improve the image of public transportation,
- (2) Increase the utilization of public transportation services,
- (3) Evaluate the implementation of innovative marketing techniques for larger area adoption.<sup>22</sup>

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<sup>21</sup>Cape Ann Transportation Authority, Cape Ann Transportation Authority Brochure (Gloucester, Mass.: CATA, 1986).

<sup>22</sup> Ibid.



Techniques which have been designed to meet those objectives include:

- (1) Informational flyers - inserted in area newspapers or shopping guides.
- (2) Direct mail - informational letters regarding bus schedules and routes.
- (3) Advertising Bus - signage contracts.
- (4) Cable TV/Radio - public service announcements the characteristics and needs of potential riders in the service area.<sup>23</sup>

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<sup>23</sup>Ibid.

## 7.0 INTERIM TRANSPORTATION SOLUTIONS

The steps necessary for Section 18 application preparation, processing and actual delivery of a Section 18 vehicle could take up to 12 months. The pressing needs of the community led the research team to investigate what strategies could be developed to meet the immediate transportation needs of the residents.

The inventory of programs and services within the surrounding community suggested the possibility of providing rides to local residents primarily through the coordination with the following providers.

### 7.1 Use of Senior Citizen Van During Down-Time

Conceptually the system would work as follows:

- a. The Transportation Steering Committee would determine the type trips, scheduling (days of the week) that residents would use the van, (based on availability).
- b. The routing schedule would be developed and advertised.
- c. The fee structure would be determined by the Transportation Steering Committee.

### 7.2 Coordination of Rides with the Tennessee Valley Rehabilitation Center (TVRC) at Calhoun Community College

Through the inventory it was determined that buses being run by the rehabilitation center were operating daily at approximate 25 percent of capacity. A coordinated system could be investigated regarding the following concerns and issues:

- a. The rehabilitation center currently has service that operates in the City of Moulton and communities surrounding North Courtland.
- b. A coordination of the service that is being provided by the center with the needs of the residents of North Courtland could be pursued.
- c. The bus could be used during its downtime and on its regular route to transport residents of North Courtland to various trip purposes such as shopping, business, and recreation.

### 7.3 Use of Lawrence County Public Transportation Vehicle to Transport Dialysis Patients

Dialysis patients in the community currently have no means of transportation to the medical centers for treatment. While investigating ways of

meeting this need, it was found that the Alabama Department of Pensions and Securities had contracted with the Kidney Foundation to coordinate transportation for those patients who need such services. The funds available could pay the cost of a driver. It had been previously determined that transportation services had been stopped due to the cost of this service. The vehicle that had been used previously was available, and with the supplemental funds from the Kidney Foundation, the cost could be subsidized and services potentially restored.

The key element in accomplishing any or all of the identified "Interim Approaches" is coordination. The research team has served in the role of mediator in the transportation planning process. As a third party the team could look at the existing conditions and circumstances of two parties and help to identify opportunities that previously had not been evident. The coordination role of the Steering Committee will be essential if transportation improvements are to be accomplished.

## 8.0 SUMMARY

The Federal programs which support the transportation needs of specific client populations have prove to be helpful in bridging the gap between the population in need and their access to a particular service. In most instances the population groups that could not use a service without some level of supplied transportation service are the same groups that experience travel problems in other areas of their lives. Rural transportation programs should play the role of opening up a broader range of travel opportunities that will reduce the isolation factor frequently associated with rural communities.

Federal programs, to be effective, must be complemented by strong local political support dedicated to the goal of transportation improvement. Communities must determine what resources are currently available. Once an inventory has been taken, an assessment of transportation needs must be made. A door-to-door survey or some other canvassing procedure can determine the travel patterns and demand. This information can supplement available statistical data to give an overview of community transportation needs. The community must solidly support the transportation effort in order to set things in motion. This takes local level leadership which can come from elected officials but often comes from private citizens who are affected by the project. The individual who is willing to step up and speak out for the community can rally people to the cause. It is important to involve the citizens for whom the effective transportation system is being developed, the riders, for they know best what their needs are.

Basic planning decisions which the Town of North Courtland has made and must continue to address if the transportation problems of the disadvantaged are to be met include:

- Determining the specific geographic area to be served.
- Establishing priorities and calculating available resources.
- Examining the feasibility of a public/private providership
- Establishing a fare structure to off set operating cost.
- Identifying potential sponsors to subsidize cost of service.
- Maintaining an active and involved Transportation Steering Committee membership.
- Designing a system for evaluating the effectiveness of the transportation service.

In summary the key to effective transportation planning involves the coordination and communication among and between local citizens, organizations, community leaders, elected officials, and program administrators at both the county and state levels.

## 9.0 RECOMMENDATIONS

Based on the findings of this study and on the assessment of the characteristics of the rural environment the following recommendations are presented:

1. Technical assistance is needed in rural communities to provide help in the step-by-step process of planning for transportation improvement.
2. The role of a mediator is often called for to move beyond the stalemate frequently existing between local residents and county administrators of transportation funds.
3. The concept of a regional transportation service should be studied due to the fact that rural counties such as Lawrence County do not provide within their jurisdiction the level of services (shopping, medical facilities, business) necessary to support the lifestyles and travel- desire lines expressed by the residents.
4. Legal barriers or interpretations of the intent of transportation program guidelines should be studied to determine the extent to which they restrict the development of transportation services that complement the travel needs of the transportation disadvantaged. The impact of county line restrictions on vehicles used in transporting employees from North Courtland to the major employers in the surrounding counties is an example of such are restrictions. In order to improve the economic status of the residents in rural communities where employment opportunities are limited, this restriction must be lifted or exceptions must be made applicable;
5. Better coordination of existing resources in rural communities must be encouraged to more fully utilize the capital investment that has been made; and
6. Transportation disadvantaged individual are unaware, for the most part, that rural transportation program operating vehicles purchased through the Section 18 program are available for use by the general public. A program to increase the awareness of this fact should be instituted.

The North Courtland Transportation Steering Committee must remain viable. The Committee will be responsible for the future of improved transportation for North Courtland. As a result of contacts developed during the course of the study, there are several avenues for the city to pursue. The committee members have been made aware of some transportation resources which are readily available through the CAA, the Tennessee Valley Rehabilitation Center, and the Yellow Cab Company. Use can be made of these resources while the Committee pursues its plans for a more comprehensive solution, a vehicle for the use of North Courtland residents.

This study has shown how vital coordination is to improving transportation for a rural area. Often communities are isolated within a rural county and essentially "the left hand doesn't know what the right hand is doing." Through conversation and communication, untapped resources can be discovered. As funding for Federal programs diminishes, waste in local programs must also diminish. Improved coordination and communication can lead to more effective use of transportation resources.

## APPENDIX A

CODE # \_\_\_\_\_

No Response \_\_\_\_\_

### QUESTIONS FOR NORTH COURTLAND RESIDENTS

1. How many persons are presently living in this house? # \_\_\_\_\_
2. a) Are there any persons under 16 living in this house? Yes \_\_\_\_\_ No \_\_\_\_\_  
  
If yes, how many? # \_\_\_\_\_  
  
b) Are there any persons over 65 living here? Yes \_\_\_\_\_ No \_\_\_\_\_  
  
If yes, how many? # \_\_\_\_\_
3. What are your current means of transportation? (Check)
  - a) Own car \_\_\_\_\_
  - b) Ride with neighbor/relative \_\_\_\_\_
  - c) Motorcycle \_\_\_\_\_
  - d) Bicycle \_\_\_\_\_
  - e) Walk \_\_\_\_\_
  - f) Senior Van \_\_\_\_\_
  - g) Taxi/For-Pay Van \_\_\_\_\_
4. a) If your family owns a car, how many cars are in this household?  
# \_\_\_\_\_



b) How many drivers are in the household? # \_\_\_\_\_

c) If family owns only one car, does worker drive car to work? Yes \_\_\_\_\_ No \_\_\_\_\_

5. How many people living in this house are employed? # \_\_\_\_\_

6. If anyone in this household is employed, where do they work?

a) Courtland - North Courtland area # \_\_\_\_\_

b) Tri Cities area # \_\_\_\_\_

c) Moulton # \_\_\_\_\_

d) Decatur # \_\_\_\_\_

e) Other # \_\_\_\_\_ Where? \_\_\_\_\_ 7. Is anyone in the household presently unemployed and seeking employment? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, how many? # \_\_\_\_\_

8. Is the lack of transportation one of the reasons for unemployment?

Yes \_\_\_\_\_ No \_\_\_\_\_

9. Is anyone in this household physically handicapped? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, how many are handicapped? # \_\_\_\_\_

If yes, how are they handicapped? (Explain--blind, use walker, wheelchair, etc.)

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10. If public transportation were available, would you use it for any or all of the following?

- a) Work Trip \_\_\_\_\_
- b) Shopping \_\_\_\_\_
- c) Medical Services \_\_\_\_\_
- d) School/Daycare \_\_\_\_\_
- e) Other (Explain) \_\_\_\_\_

11. Can you give me an estimate of the total annual income for your family?  
Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, check below:

Less than \$5,000 \_\_\_\_\_

\$5,000 - \$6,500 \_\_\_\_\_

\$8,000 - \$10,000 \_\_\_\_\_

\$10,000 - \$12,000 \_\_\_\_\_

\$12,000 - \$14,000 \_\_\_\_\_

Over \$14,000 \_\_\_\_\_

THANK YOU FOR YOUR HELP!!!

APPENDIX B  
Taxi Cab Companies  
Within the Region of North Courtland

Freeman's Cab Company  
108 North Clinton  
Athens, Alabama 35611  
Phone: 232-8536  
(24 miles)

Cullman Taxi Service  
701 2nd Avenue SW  
Cullman, Alabama 35055  
Phone: 734-0115  
(47 miles)

E. L. Walton Cab Company  
824 Brown's Ferry  
Athens, Alabama 35611  
Phone: 232-3789  
(24 miles)

Yellow Cab Company  
215 Grant Avenue SE  
Decatur, Alabama 35601  
Phone: 350-0649  
(20 miles)

Tennison Cab Company  
Monroe Avenue  
Athens, Alabama 35611  
Phone: 232-0895  
(24 miles)

Hartselle Taxi Service  
800 Highway 31 North  
Hartselle, Alabama  
Phone: 773-9139  
(34 miles)

APPENDIX C  
Advertising Contract

\_\_\_\_\_ agrees to rent  
Name of Company  
advertising space on the \_\_\_\_\_ van. The space allotted  
will be guaranteed from \_\_\_\_\_  
for three months. Space may be renewed quarterly.

\_\_\_\_\_ will be responsible for designing the information to be  
used on the sign for the vehicle. (You must accept the  
finished product.)

\_\_\_\_\_ will be responsible for making sure your  
sign is designed as you request it.

Cost:

*Cost of sign (7½" x 24")	\$15.00 (example)
Cost of space (\$15 per month)	25.00
	_____
Initial cost to advertise	\$40.00

\*The sign will belong to you.

\_\_\_\_\_  
Name of Owner

\_\_\_\_\_  
Date

Renewal for Advertising Contract

\_\_\_\_\_  
Name of Company  
agrees to renew advertising space on the \_\_\_\_\_ van. The  
space allotted will be guaranteed from the dates \_\_\_\_\_  
\_\_\_\_\_ for three months. The cost  
for the three (3) month period will be \$25.00.

\_\_\_\_\_  
Name of Owner

\_\_\_\_\_  
Date

## APPENDIX D

Dear Citizen:

This questionnaire has been prepared for you as a means of determining whether we can start a vanpool for work trips. Will you please complete this form and leave it with your pastor.

1. There are \_\_\_\_\_ persons presently employed in my household.
2. There are \_\_\_\_\_ persons over 16.
3. Those persons currently employed work during the hours noted and for the name of the company noted.

	<u>Name of Company</u>	<u>Hours of Work</u>	<u>Community</u>
a.	_____	_____	_____
b.	_____	_____	_____
c.	_____	_____	_____
d.	_____	_____	_____

4. Our present way of getting to work is:

- a. \_\_\_\_\_ my own car
- b. \_\_\_\_\_ a neighbor's car
- c. \_\_\_\_\_ taxi
- d. \_\_\_\_\_ walk to work
- e. \_\_\_\_\_ other (please explain)

5. If a van were available, I would use such a vehicle \_\_\_\_\_ Yes \_\_\_\_\_ No

Yes, I would be willing to pay (please check)

\_\_\_\_\_ 50¢ each way

\_\_\_\_\_ 1.00 each way

\_\_\_\_\_ 2.00 each way

\_\_\_\_\_ 3.00 each way

\_\_\_\_\_ actual expense

6. I am interested in helping to provide a vanpool transportation program  
and wish to be contacted as a follow-up to this questionnaire

\_\_\_\_\_ Yes \_\_\_\_\_ No

a. If yes, please fill out the following:

Name: \_\_\_\_\_

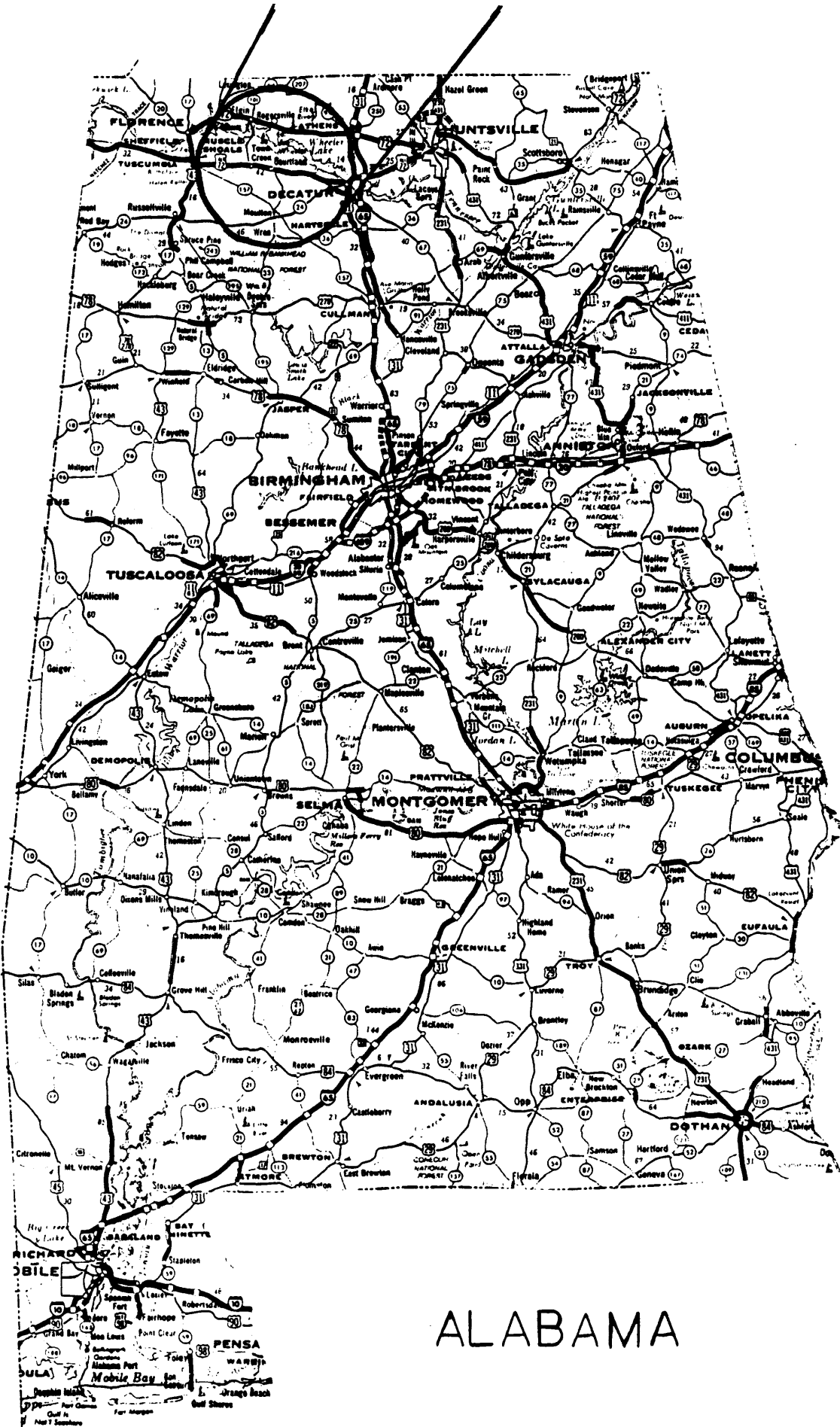
Street: \_\_\_\_\_

Mail Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Thank you

# APPENDIX E RESEARCH STUDY AREA



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